

We hope this activity book has
helped you picture a healthy environment
for plants, animals, and people.



Environmental Department

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ENVIRONMENTAL PROTECTION DEPARTMENT

Help Stop The Spread Of Invasive Plants



To Our Environment



Belongs To _____

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Map of Morongo Reservation



Answer Key for crossword puzzle:

Across:

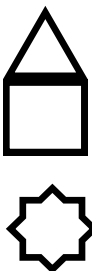
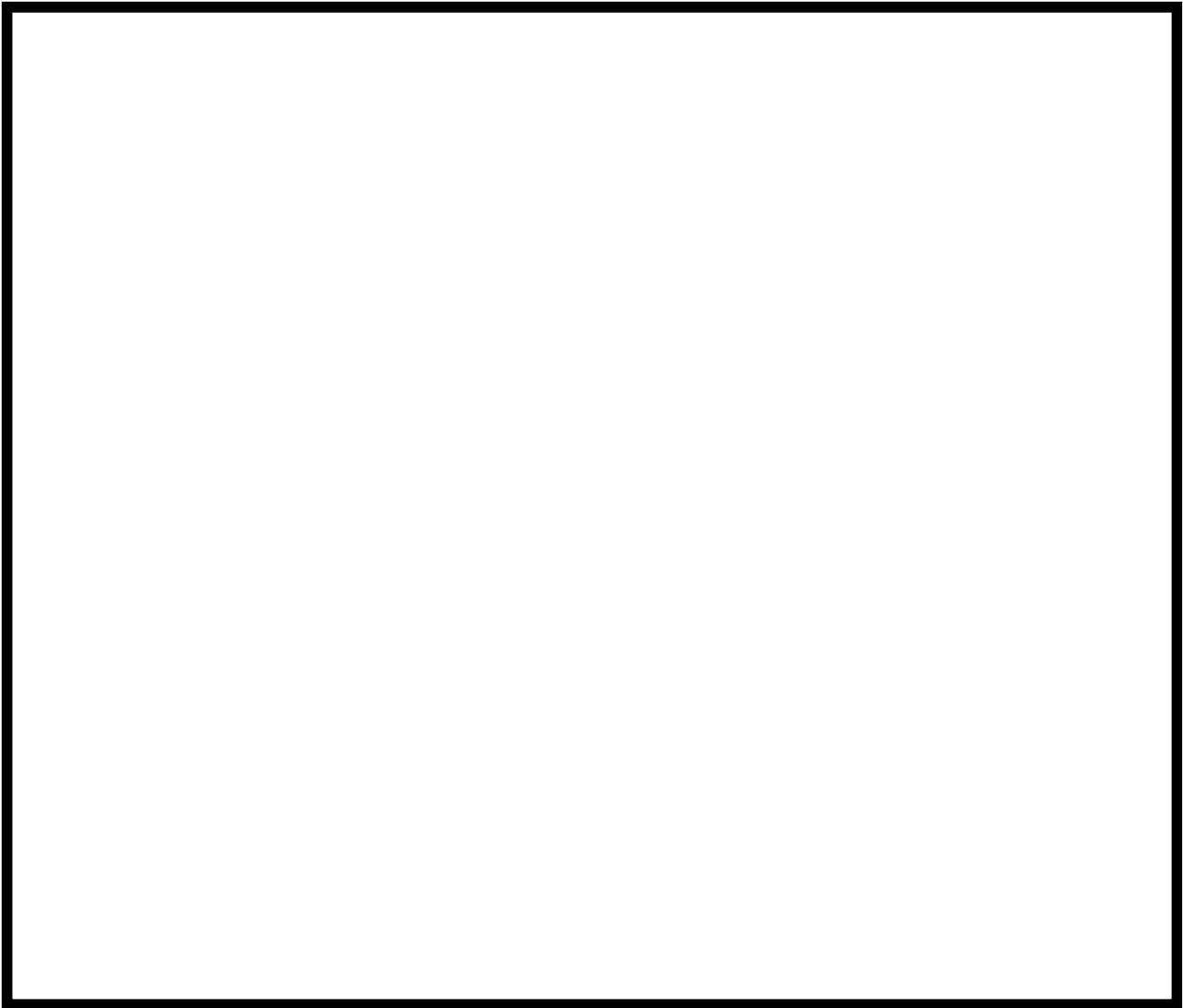
1. Wheels
2. Small
3. Bare
4. Insects
5. Gardens

Down:

1. World
2. Seeds
3. Boats
4. Trails
5. Animals

Make an Invasive Plant Map

Draw a map of your school's playground or your backyard.
Then look for invasive plants and mark their location on the map.



Use these map symbols or create your own:

Building

Tree



Invasive Plant



Sidewalk

In this activity book, you will learn about different invasive plants and some ways we try to control them.

What is an invasive plant?

Invasive plants are invaders that damage the environment and make it harder for farmers and ranchers to raise crops and livestock. The most troublesome invasive plants spread quickly and compete successfully. Some scatter millions of seeds. Some spread by their roots. A new plant can sprout from a broken-off stem of some plants.

Why are invasive plants a problem?

Invasive plants crowd out native plants and useful non-native plants. Some are poisonous and most provide less food and shelter for wild animals. On farms and ranches invasive plants compete with crops for water, soil, and sunlight. We spend a lot of time and money fighting them.

Where do invasive plants come from?

Sometimes people bring the seeds from distant lands accidentally. One of California's worst invasive plants, Russian Thistle, arrived with European settlers more than a century ago. The settlers did not know that invasive plants were in the flax seed that they brought with them to South Dakota. In its native land, Russian Thistle is not much of a problem but in California it's a monster! Other weeds started out as garden or aquarium plants. When gardeners brought them to California, they did not know that the plants would become "invaders".

How do we control invasive plants?

Everyone can help fight invasive plants!



Seeds stick to our shoes and clothes when we hike. Try not to let seeds fall off in a new area. Pull the seeds out before you leave a weedy area.



Buy garden plants from people who know about "plant invaders" and will not sell them.



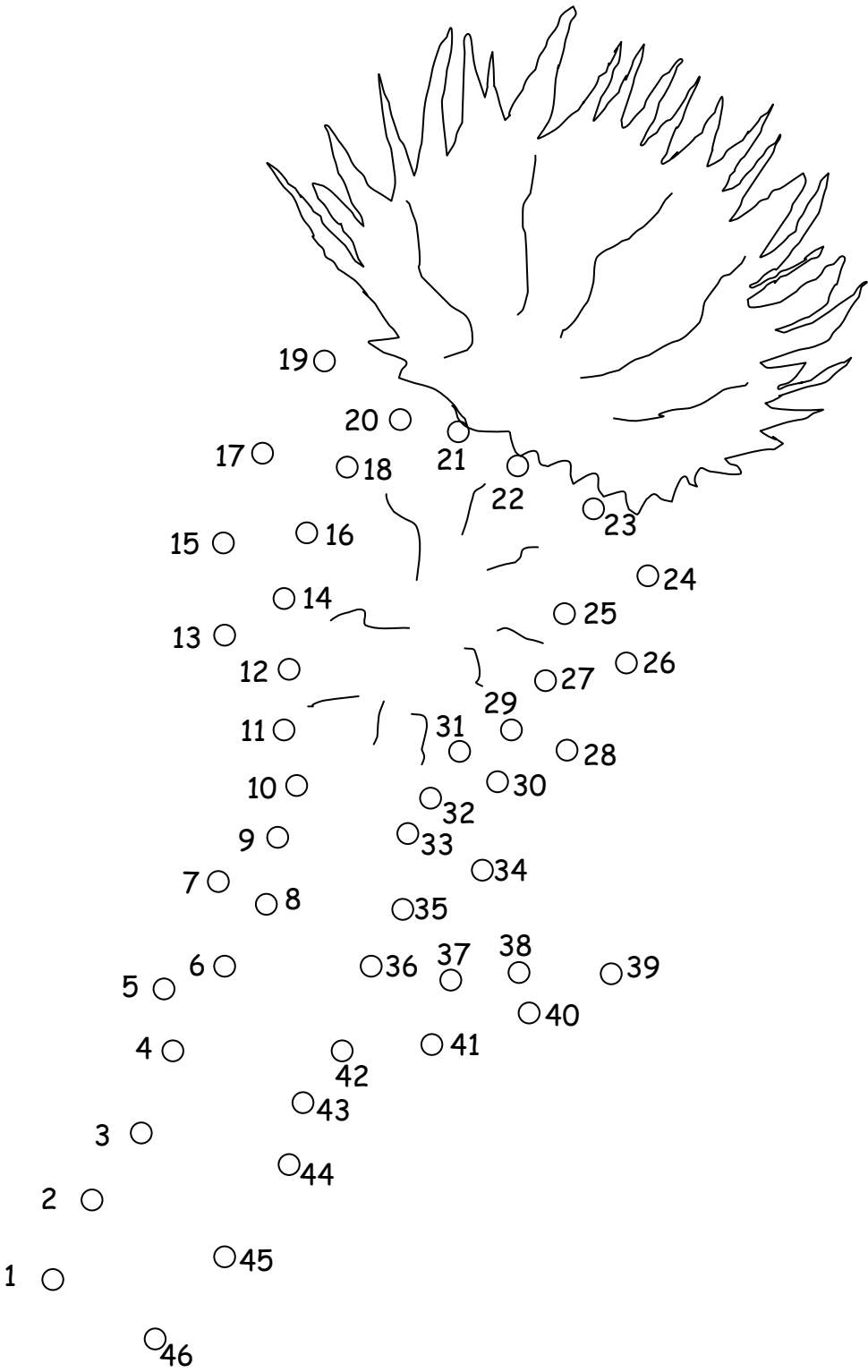
Animals can help us control invasive plants. Cattle, sheep, and goats eat some of them. This is called a biological control, or bio-control, for that invasive plant.



Many invasive plants are controlled with a correctly applied chemical spray.

Bull Thistle

Dot-to-Dot



Invasive Plant Invaders!

Invasive plants create hard times for people, animals and native plants. Find and circle all the problems where these bully plants have taken over.

Clue: There are 8 problems to look for.



Where would you find...

Bare ground invites invasive plants to grow and multiply.

Invaders are good at living in places where other plants have a hard time growing, such as gravel edges of roads or places used a lot by people and vehicles (cars, ATVs, bikes, boats, trains).

Some grow along streams and wetlands too, and others live in water.

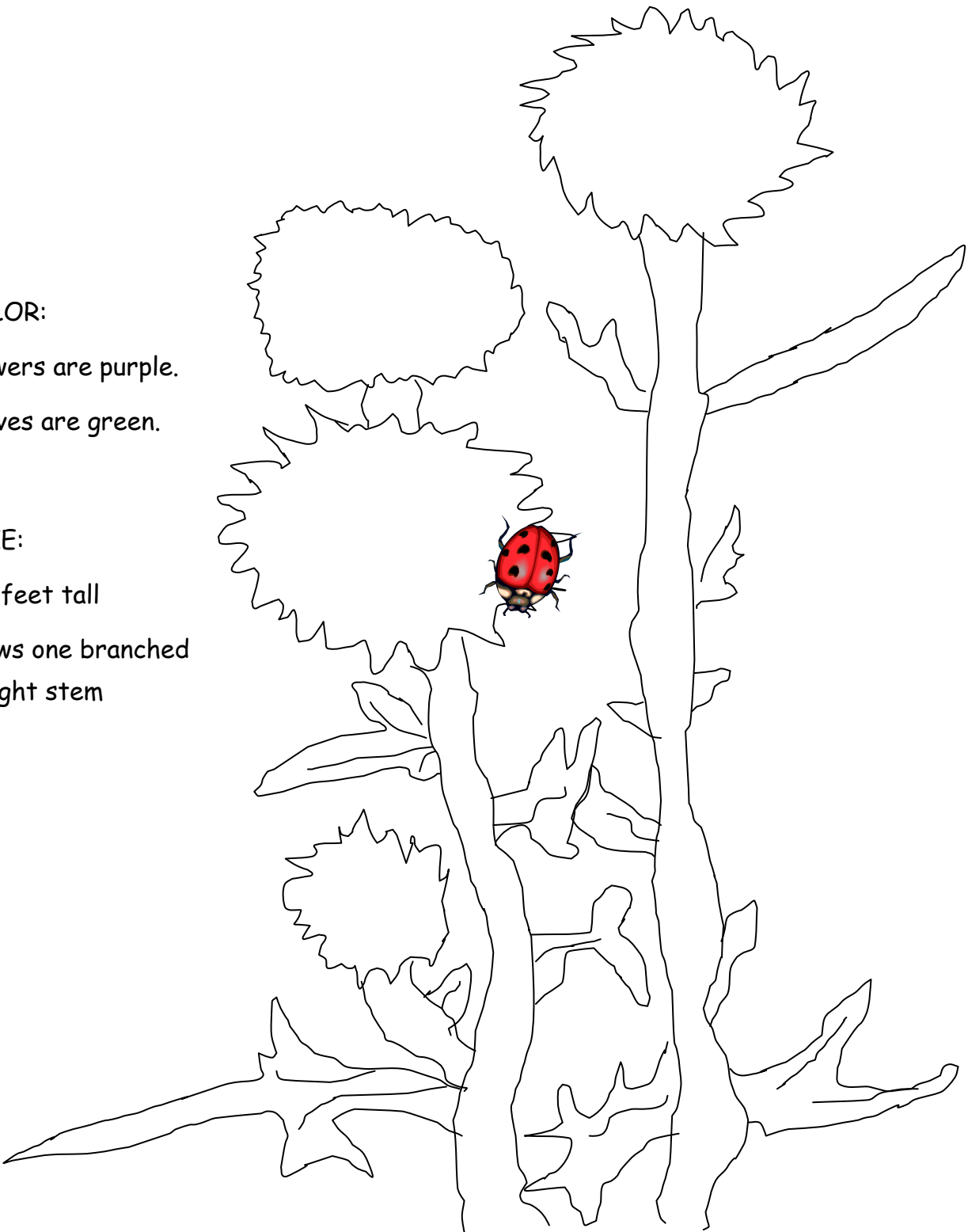
Put a ✓ beside the places you would expect to find plant invaders growing and an ✗ where you would not.

A) On top of a mountain	
B) A boat launch	
C) Gravel pit	
D) Road edge	
E) A stream bank in a popular park	
F) In space	
G) Building construction site	
H) The Wilderness	
I) Along a railway line	
J) Where bikes and ATVs went off-trail and stirred up the soil	

Bull Thistle

COLOR:
Flowers are purple.
Leaves are green.

SIZE:
3-6 feet tall
Grows one branched
upright stem



WHY IS IT A PROBLEM? Outcompetes native and desirable plant life. It invades disturbed habitats such as pastures, roadsides, and ditch banks. It is an economic threat by reducing hay quality. Sharp spines can irritate and harm grazing animals.

CONTROL: Spreads quickly where the ground has been dug up and left bare. The less we disturb the soil, the harder it is for these plants to spread!

Tree Tobacco

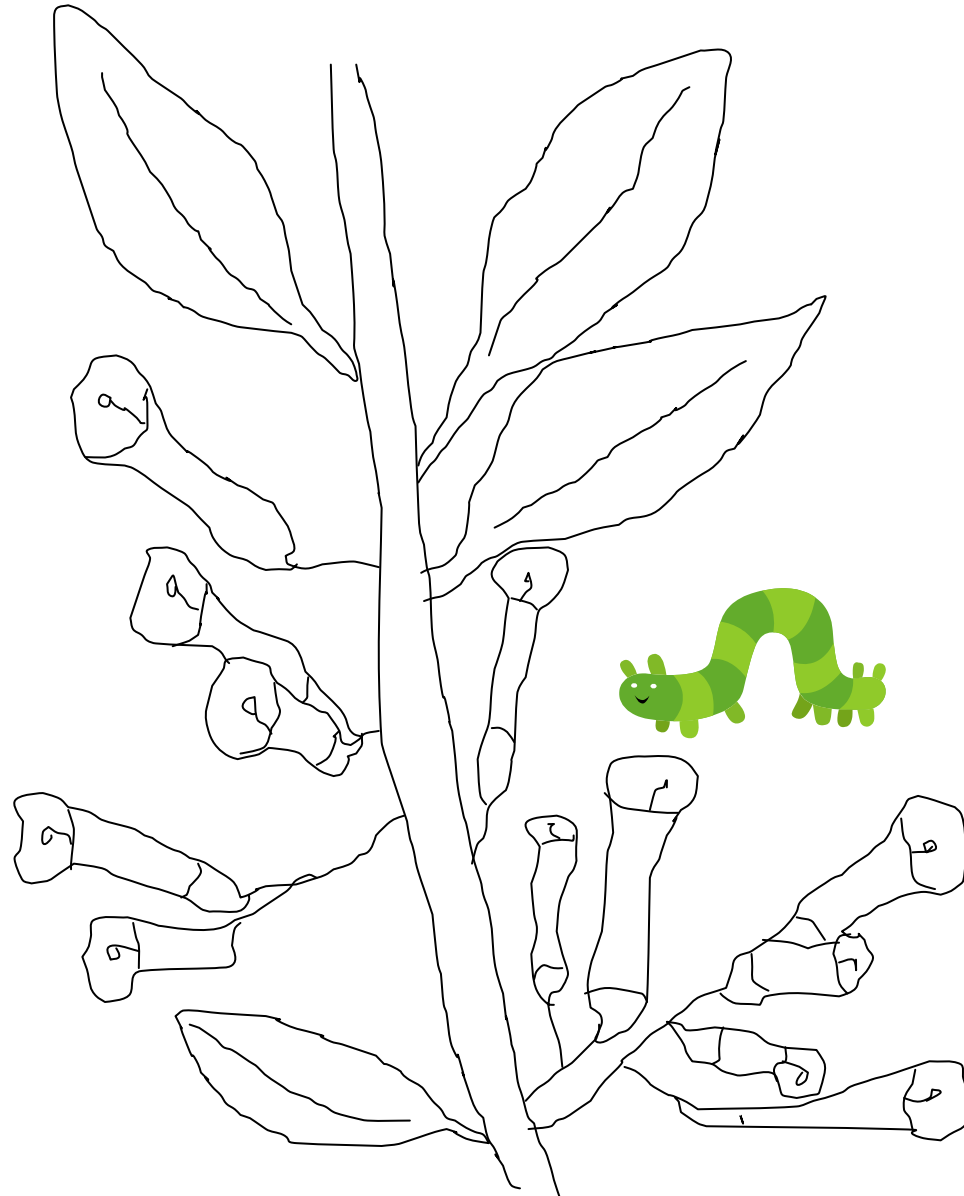
COLOR:

Green thick leaves

Tubular bright yellow
flowers

SIZE:

6-20 feet tall



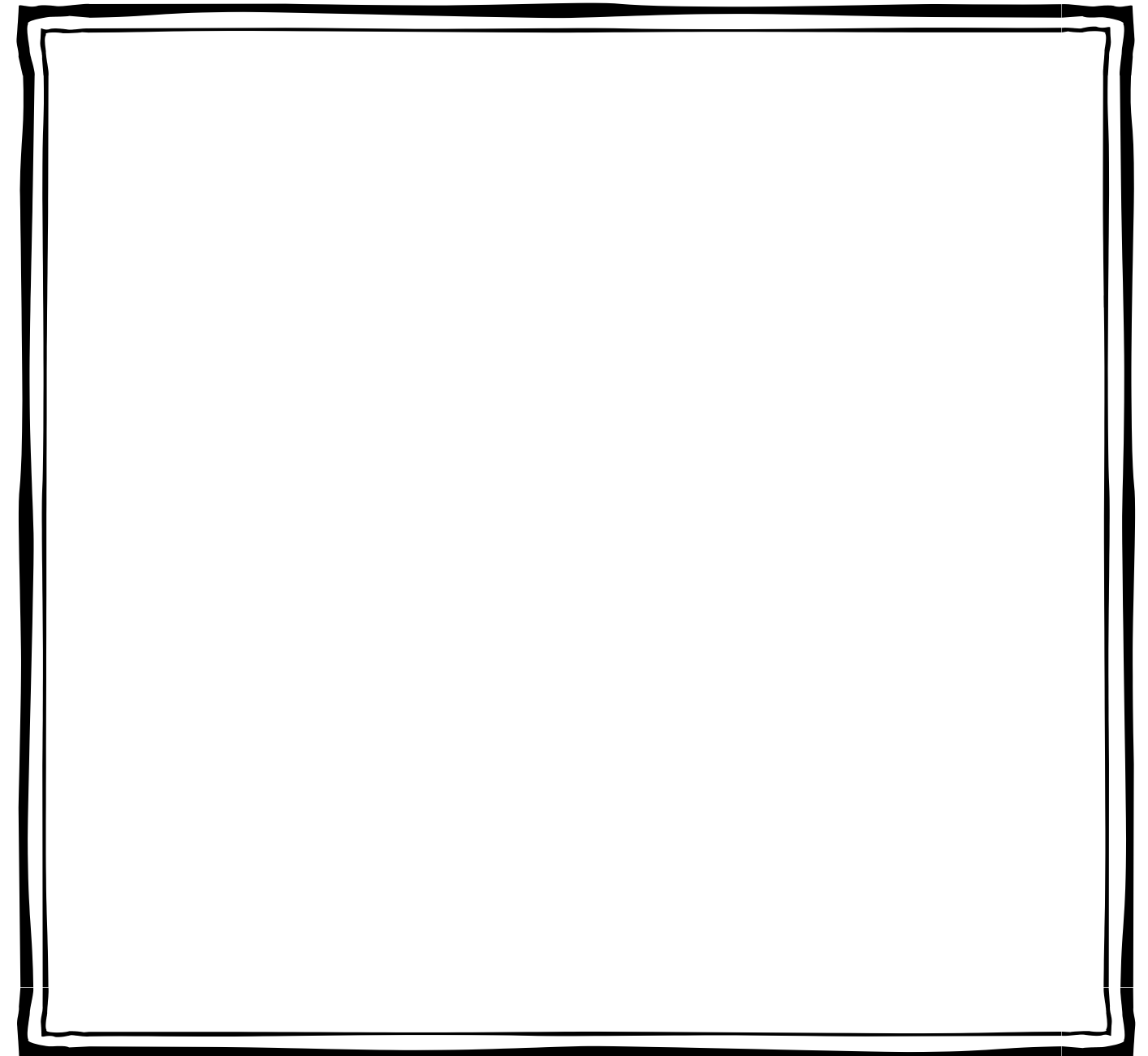
WHY IS IT A PROBLEM? Displaces native vegetation used by wildlife and contributes to bank erosion and flooding. It is also toxic to humans and animals. If livestock ingest it, it can cause deformities in calves.

CONTROL: Hand pulling small seedlings. For larger shrubs, a weed extractor can be used. The entire root should be taken out, preferably in moist soil and before it flowers.

Design Your Own Invasive Plant

Where does it grow?

Why is it a pest?

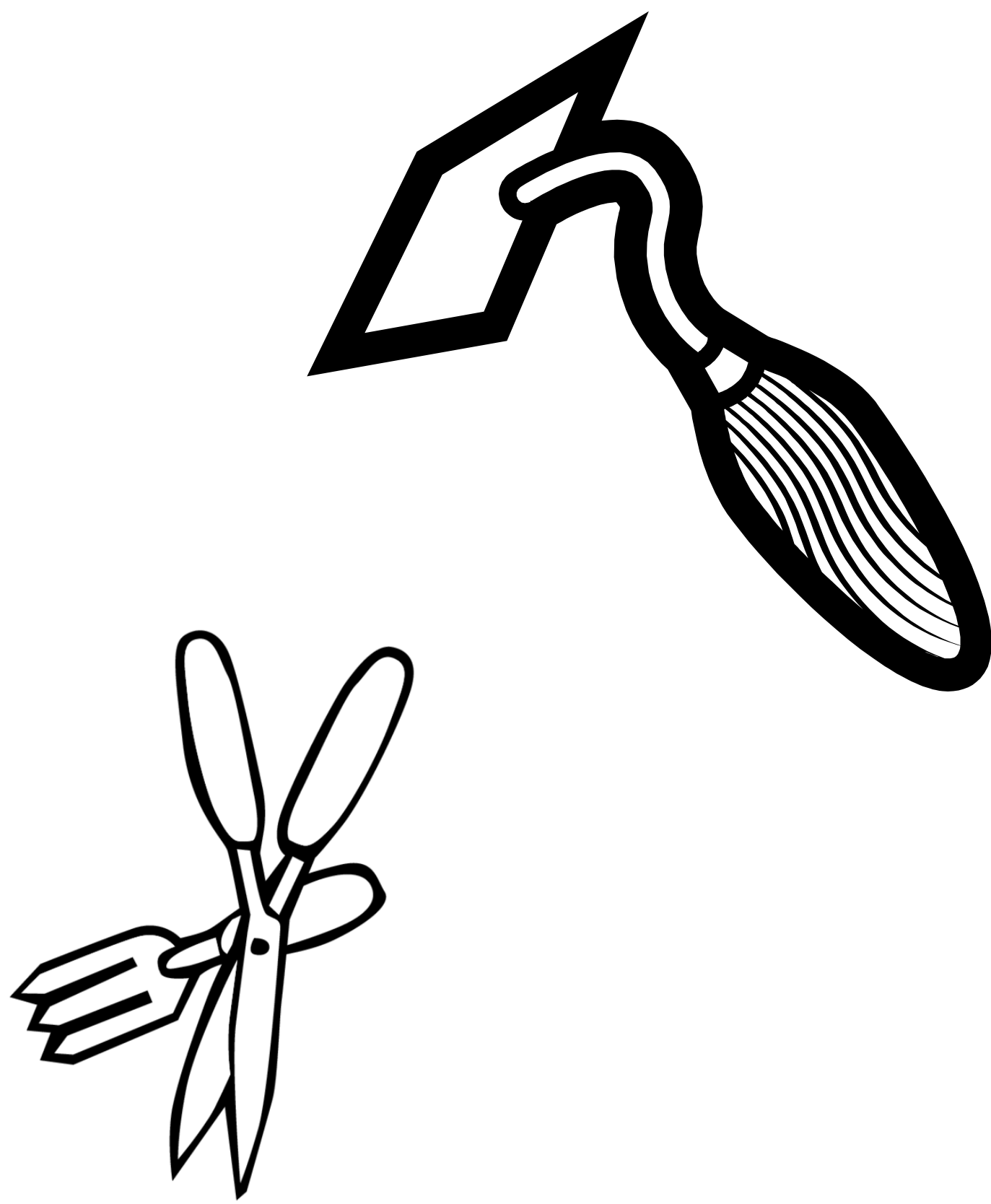


Design Your Own Bio-Control.

What kinds of animals eat your plant?

Does your plant have any defense against predators?

Color the mechanical controls!

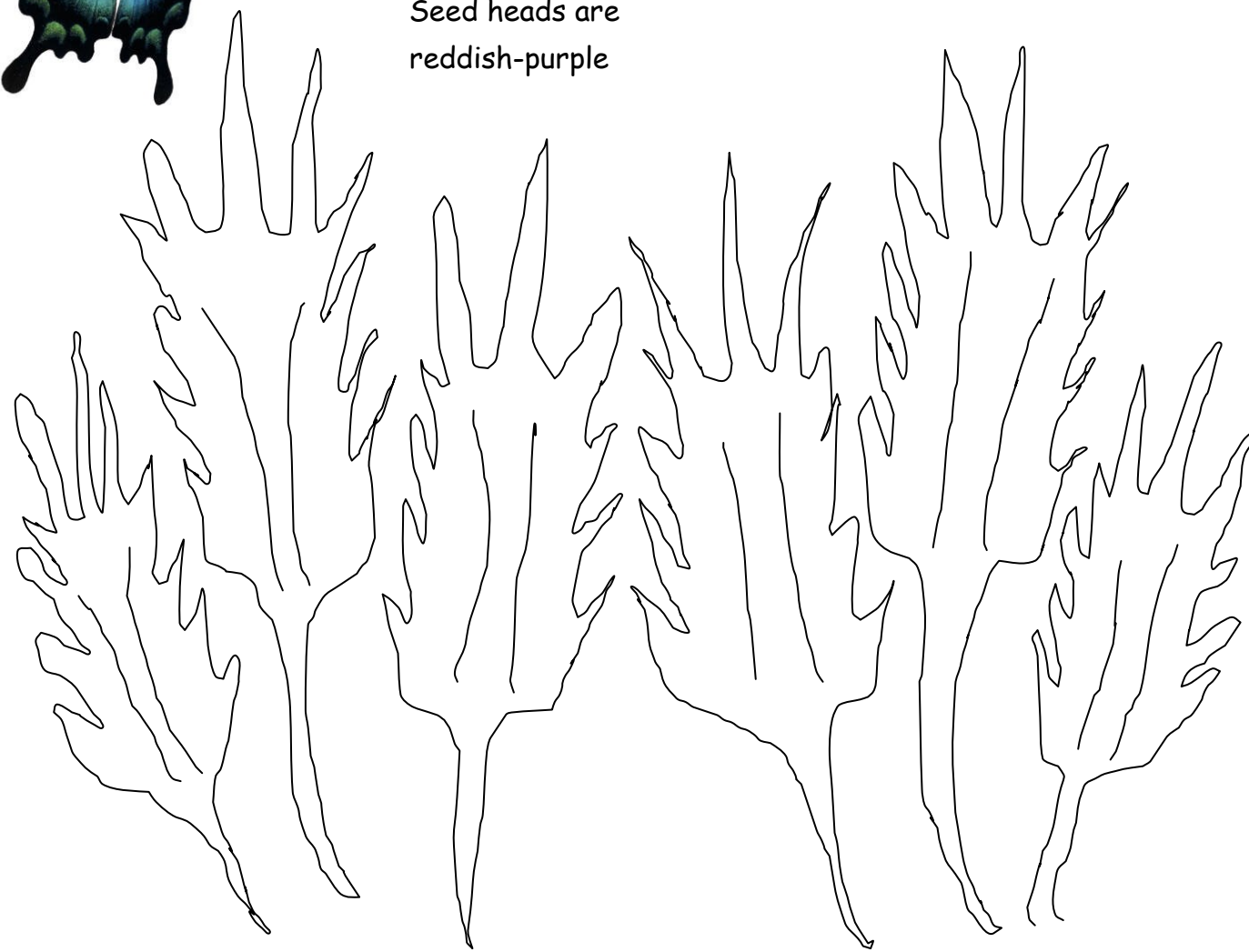


Red Brome



COLOR: Green stems
Seed heads are reddish-purple

SIZE: 8-20 inches tall



WHY IS IT A PROBLEM? Red brome is abundant here on the reservation. It was introduced to feed cattle. It is a problem because it carries fire where fire does not naturally occur.

CONTROL: Let the cattle graze on the brome, then mow the area down. Prior to spring, rake up litter then mulch area with organic matter. Also, seeding the area with native perennial plants.

Black Mustard

COLOR:
Flowers are bright yellow
Stems are green

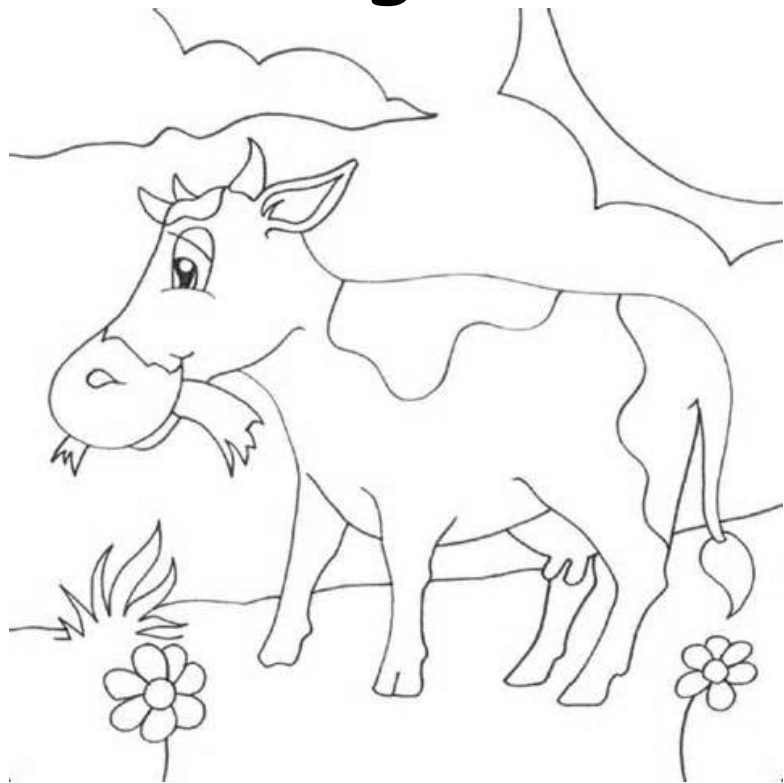
SIZE:
3-6 feet tall



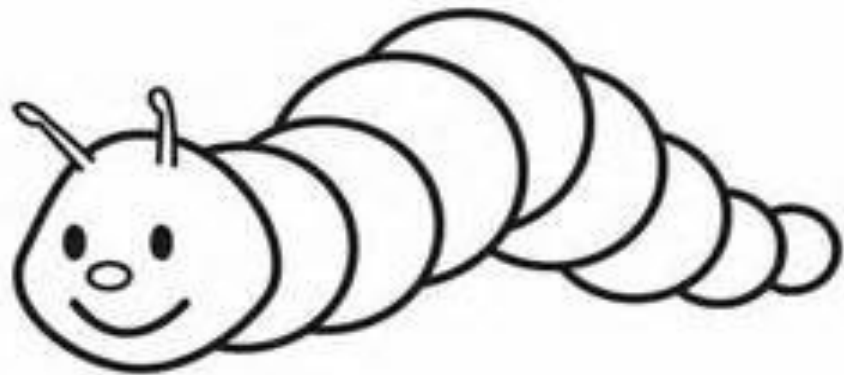
WHY IS IT A PROBLEM? Releases a toxicant when plants try to grow around it. Harmful to livestock when ingested. It is fuel for fire and threatens native plants.

CONTROL: Hand-pulling the plants out of areas and till the plants before they mature.

Color the biological controls!



Cattle



Caterpillar

Native Plants of Morongo

Search-a-word Puzzle



Black Sage

Brittlebush

Chuparosa

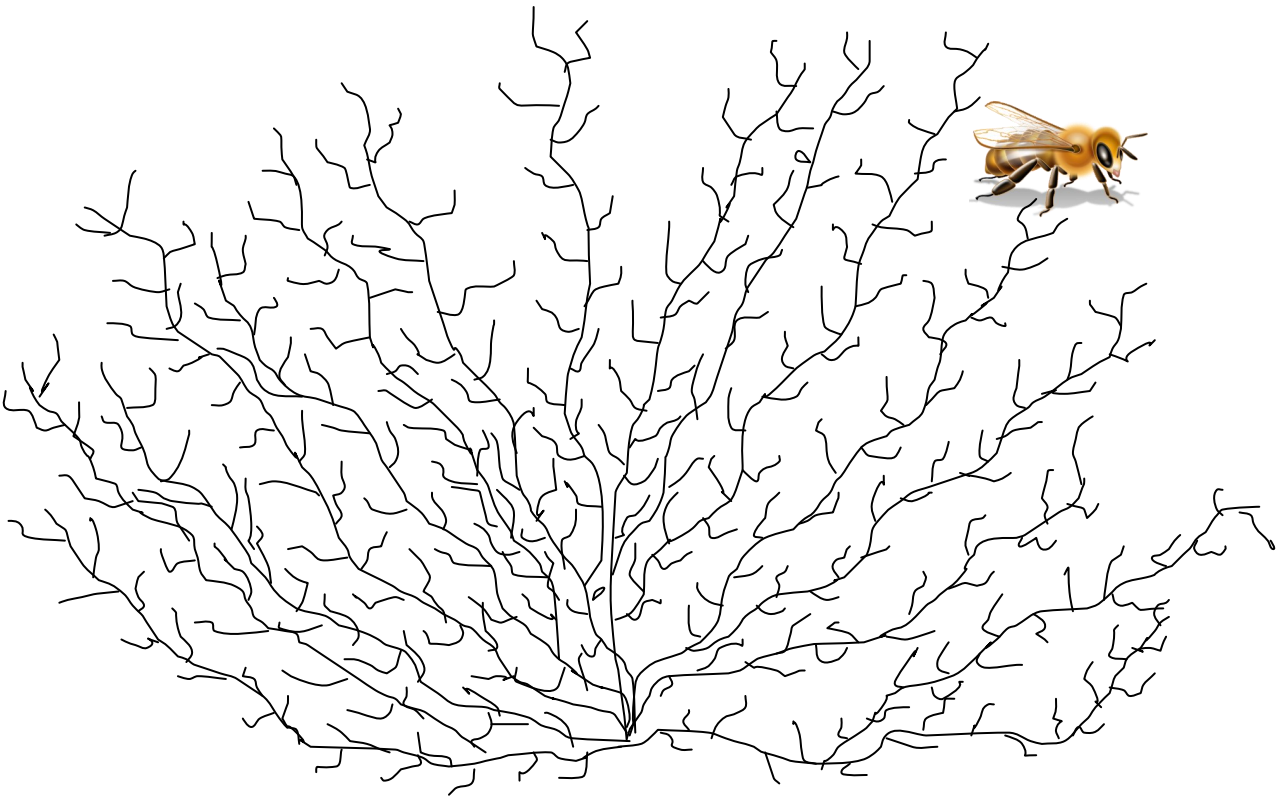
Desert Mallow

Mission Cactus

Mormon Tea

Saltbush

Russian Thistle



COLOR:

Green when mature

Yellow when dead

Flowers are light pink to red

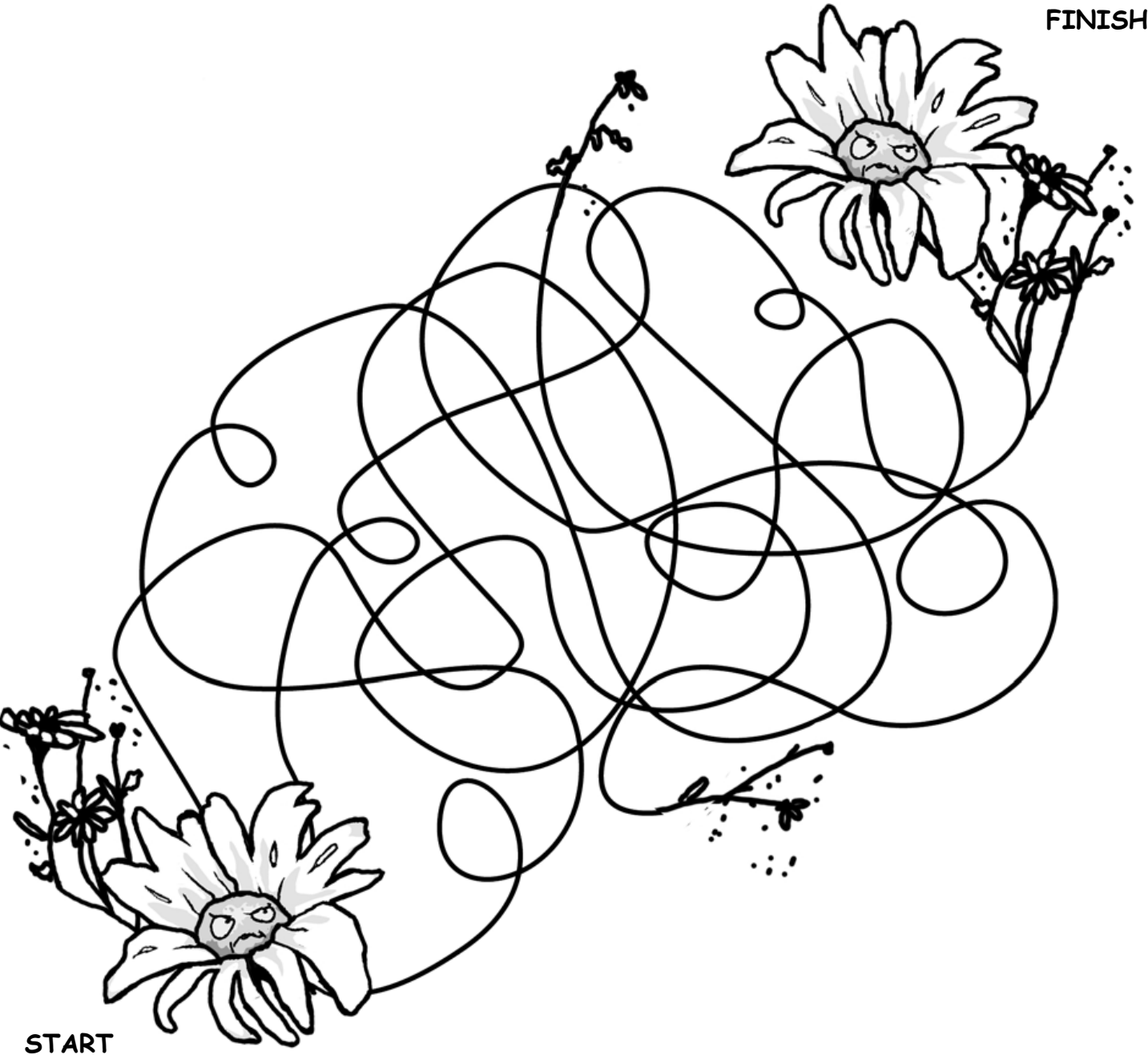
SIZE:

3 feet tall

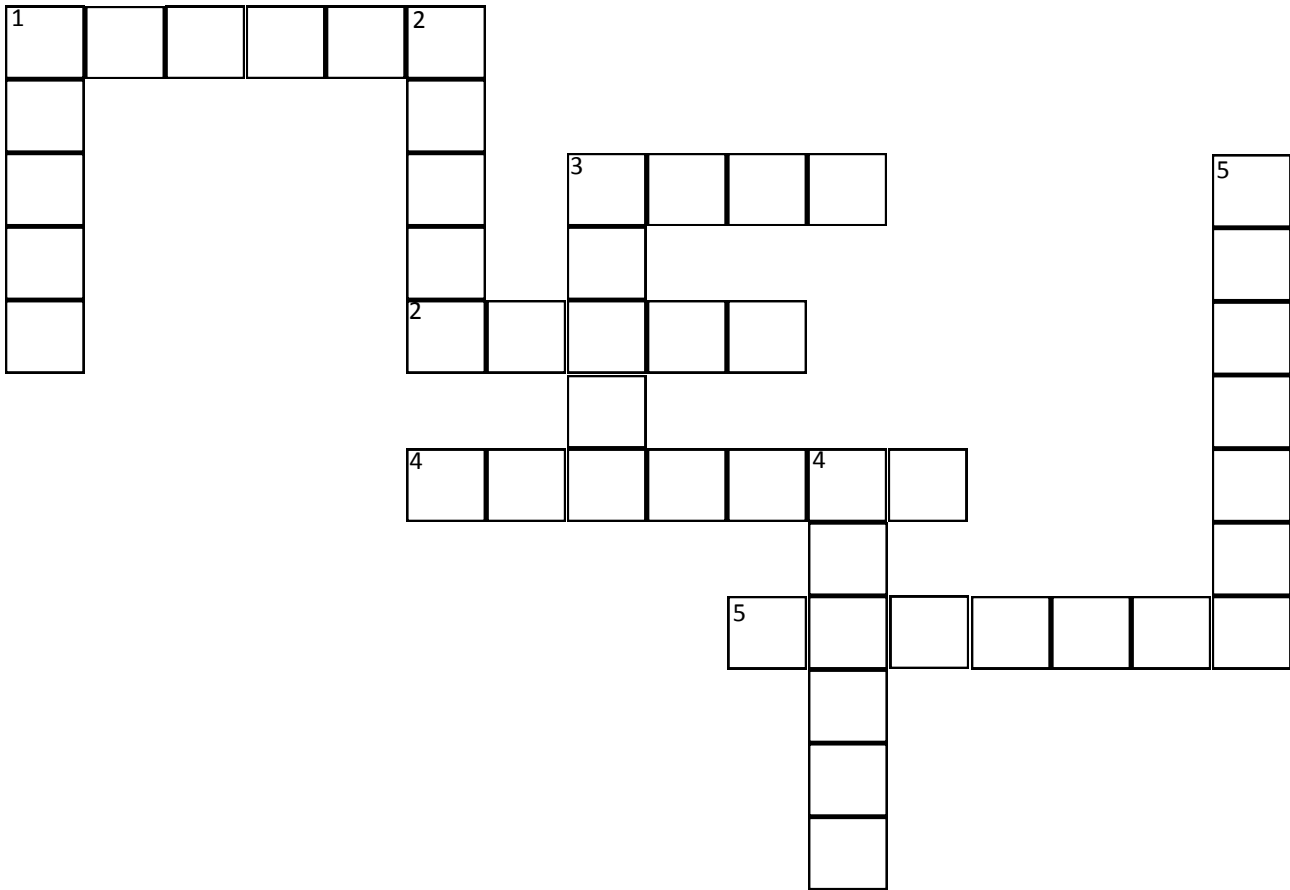
WHY IS IT A PROBLEM? This particular type of thistle is very drought resistant and takes up the little resources the reservation has for plants. Also, the wind blows the plant seeds to walls and fence lines where they sprout. This is especially hazardous for fire fighting.

CONTROL: Hand pulling and using a chemical herbicide spray in the area. Revegetation of that area, and keeping it from being overgrazed.

Some plants make use of the wind to spread their seeds.
 This allows plant seeds to go far.
 Along what path did the wind blow this seed?



Crossword



Across:

- 1. Seeds can get a free ride to on bike and vehicle _____.
- 2. _____ patches of invasive plants are easier to control than large ones.
- 3. Invasive plants grow well on _____ ground.
- 4. Animals with six legs. Can be plant predators.
- 5. Places where we grow plants and where some can escape from.

Down:

- 1. Invasive plants come from other parts of the _____.
- 2. Invasive plants often each produce thousands of these.
- 3. Propellers and trailers for these can move invasive aquatic plants.
- 4. Slow the spread by not riding bikes and ATVs off of these.
- 5. Plant invaders force wild _____ to go farther to look for food.